

Date: Wednesday, 1/18/2006 4:05:21 PM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: BRACKET ASSEMBLY		
Job Number	: 25557B					
Estimate Number	: 10290					
P.O. Number	: N/A			Part Number	: D3121144	
This Issue	: 1/18/2006		S.O. No. : N/A	Drawing Number	: D3121 REV C2	
Prsht Rev.	: NC			Project Number	: N/A	
First Issue	: N/A		Type : MACHINED PARTS	Drawing Revision	: C2	
Previous Run	: 25442B			Material	: N/A	
Written By	<u>SEE COMMENT BELOW</u>			Due Date	: 2/15/2006	
Checked & Approved By	<u>JL</u>			Qty:	4 Um: Each	
Comment	: Est Rev:Pick:A 04.02.18 New issue KJ/DS					

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M174B1000X02000	17-4 SS Bar	
		Comment: Qty.: 0.3864 f(s)/Unit Total : 1.5456 f(s) Material: 17-4 SS Bar per AMS 5604/5643 (M17-4-B1.000x02.000) Identify for D3121-114 Batch: <u>M19712</u>	
			 JL/SO 06.02.17 4
2.0	BAND SAW	BAND SAW	
		Comment: BAND SAW Cut blanks: (1.000" x 2.000") 4.425" long	 JL/SO 06.02.17 4
3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1	
		Comment: HAAS CNC VERTICAL MACHINING #1	
		1-Machine D3121-114 as per Folio FA330 and Dwg D3121 Identify as D3121-114	
		2-Deburr	
		3-Scribe batch number	 JL 06.02.18 4
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE	
		Comment: INSPECT PARTS AS THEY COME OFF MACHINE	 JL 06.02.18 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Wednesday, 1/18/2006 4:05:21 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BRACKET ASSEMBLY

Job Number: 25557B

Part Number: D3121144

Job Number:



Seq. #:	Machine Or Operation:	Description :
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5.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

MS 06/02/18 4

6.0	D312121	Bolt
-----	---------	------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number	Description	Batch
2 D3121-21	Bolt	<u>B25456</u>

J.L 06.02.18

7.0	D3121241	Bearing Assembly
-----	----------	------------------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number	Description	Batch
2 D3121-241	Bearing Ass	<u>B25225</u>

J.L 06.02.18 4

8.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble D3121-143 as per Dwg D3121.

J.L 06.02.18 4

9.0	QC5	INSPECT WORK TO CURRENT STEP
-----	-----	------------------------------



Comment: INSPECT WORK TO CURRENT STEP

MS 06/02/18 4

10.0	PACKAGING 1	PACKAGING RESOURCE #1
------	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST 408

C 206102120 4

11.0	DC	DOCUMENT CONTROL
------	----	------------------



Comment: DOCUMENT CONTROL

Inspection Level 21

5/18 06/02/21

4

DP 06/02/21 11

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA:  Date: 06/01/21
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	25557B
Description: Bracket	Part Number:	D3121-114
Inspection Dwg: D3121	Rev: B1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.800	+/-0.010	1.801	✓			
R0.25	+/-0.030	.250	✓			
0.30	+/-0.030	.300	✓			
0.015	+/-0.010	.010	✓			
0.392	+0.002/-0.000	.392	✓			
2.24	+/-0.030	2.230	✓			
3.67	+/-0.030	3.67				
3.41	+/-0.030	3.416	✓			
0.130	+/-0.010	.132	✓			
2.540	+/-0.010	2.541	✓			
2.220	+/-0.010	2.218	✓			
1.590	+/-0.010	1.590	✓			
0.160	+/-0.010	.161	✓			
3.80	+/-0.030	3.795	✓			
0.400	+/-0.010	.401	✓			
1.220	+/-0.010	1.228	✓			
1.600	+/-0.010	1.601	✓			
0.400	+/-0.010	.399	✓			
0.201	+/-0.010	.202	✓			
0.381	+/-0.010	.389	✓			
0.580	+/-0.010	.587	✓			
0.032	+/-0.010	.029	✓			

Measured by:	JL	Audited by:	in	Prototype Approval:	N/A
Date:	06.02.18	Date:	06/02/18	Date:	N/A

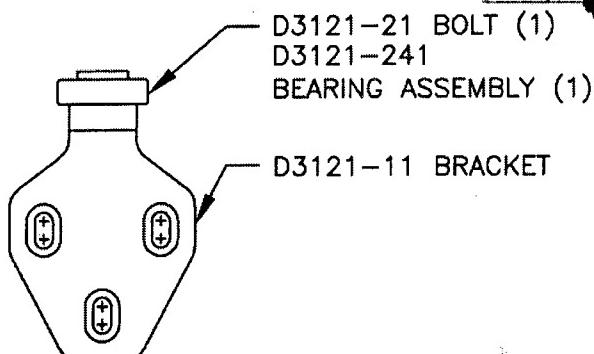
Rev	Date	Change	Revised by	Approved
A	03.12.08	New Issue	KJ/RF	

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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		D3121	SHEET 1 OF 10

DATE	TITLE	SCALE
04.02.17	BRACKET ASSEMBLY	1:2

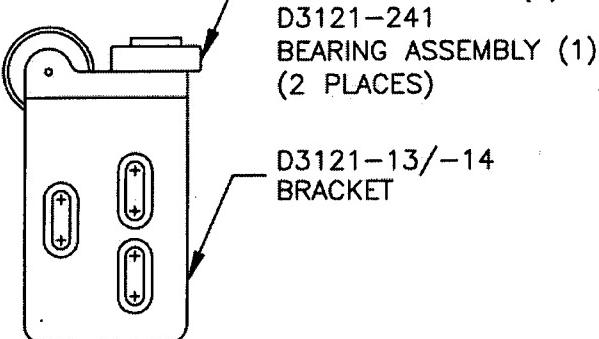
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04.03.01



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)

D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)

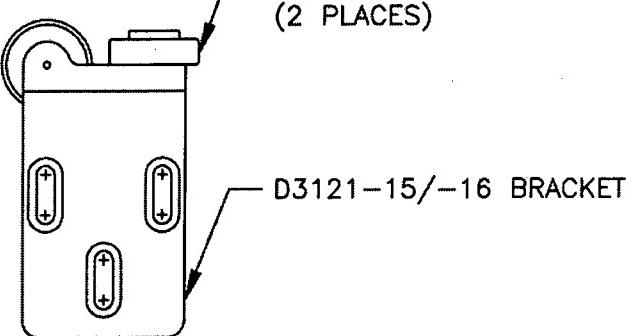
D3121-11 BRACKET



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)
(2 PLACES)

D3121-13/-14
BRACKET

D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-37/-38)



D3121-21 BOLT (1)
D3121-241
BEARING ASSEMBLY (1)
(2 PLACES)

D3121-15/-16 BRACKET

D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-35/-36)

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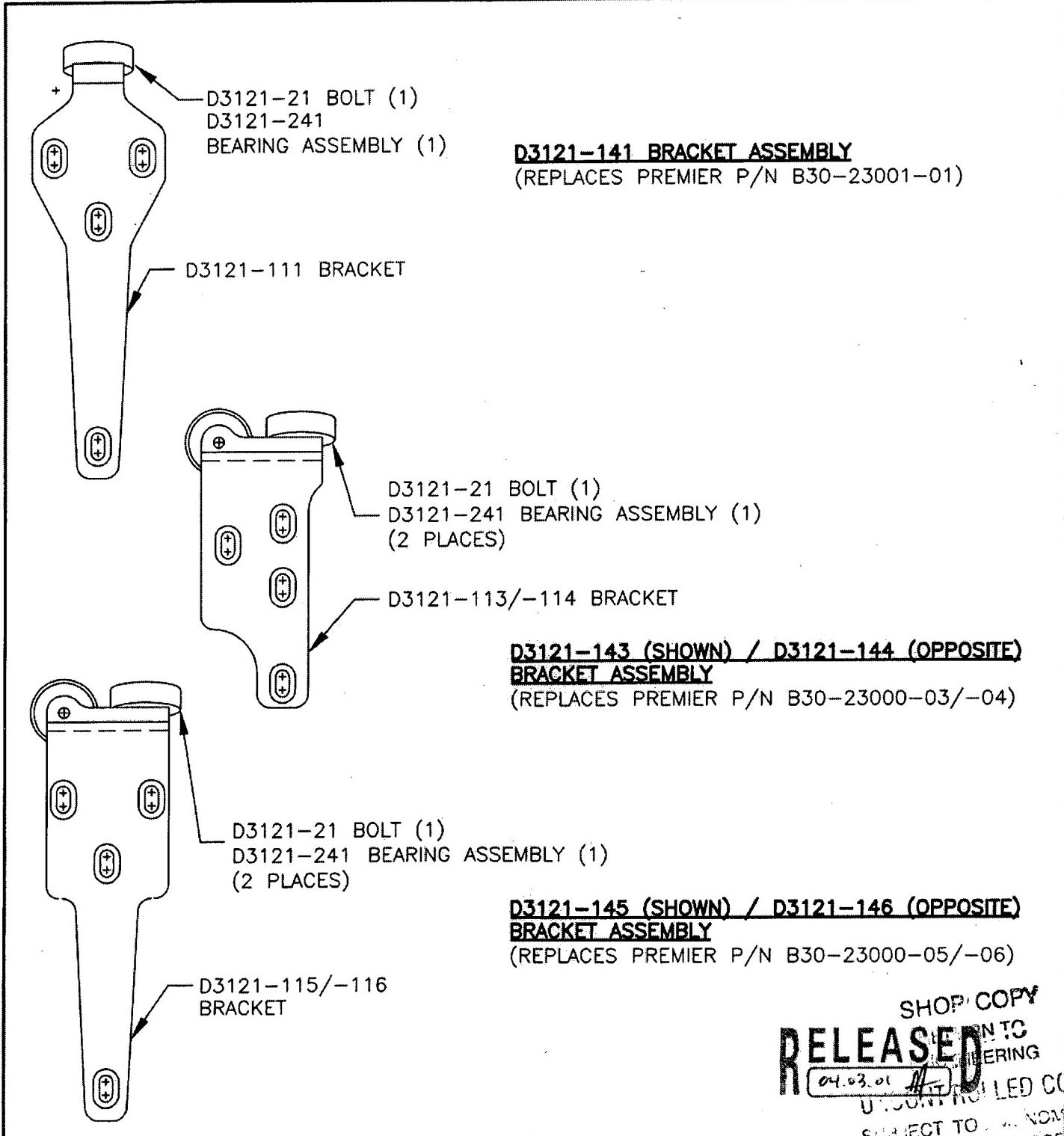
WORK ORDER
NO. 25557B

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DATE 04.02.17		TITLE BRACKET ASSEMBLY	SCALE 1:2

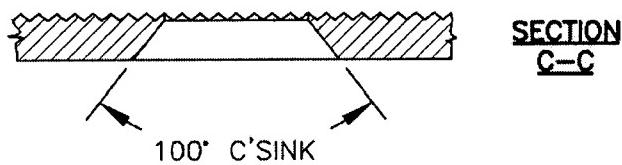
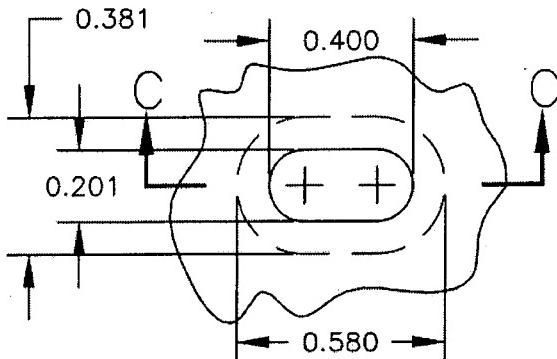
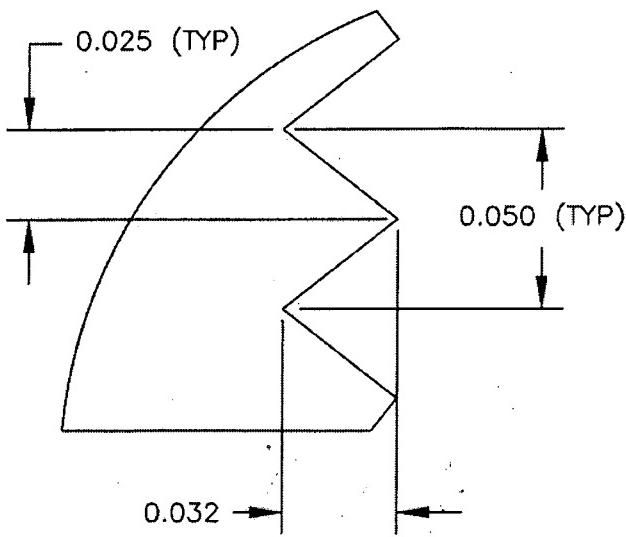


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DATE	04.02.17	TITLE BRACKET ASSEMBLY SCALE 1:1

RELEASED
04.03.01**DETAIL A:**
SLOT DETAIL
SCALE 2:1
VIEW ROTATED**DETAIL B:**
RIDGE DETAIL
PARTIAL SECTION
SCALE 1:20

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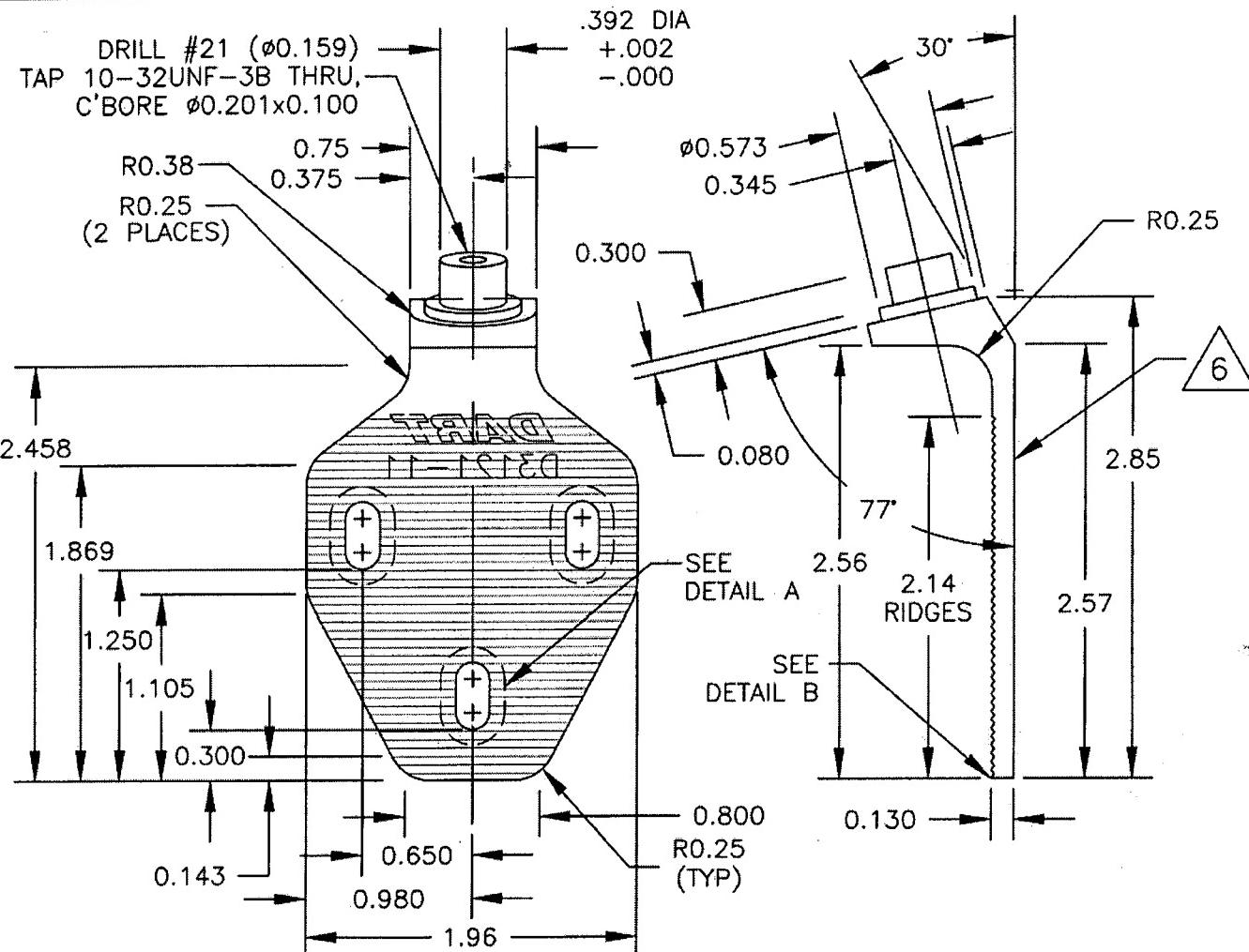
DART AEROSPACE LTD
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REV. C

SHEET 4 OF 10

SCALE

1:1

**D3121-11 BRACKET**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
 MIN ULTIMATE TENSILE = 150 ksi
 MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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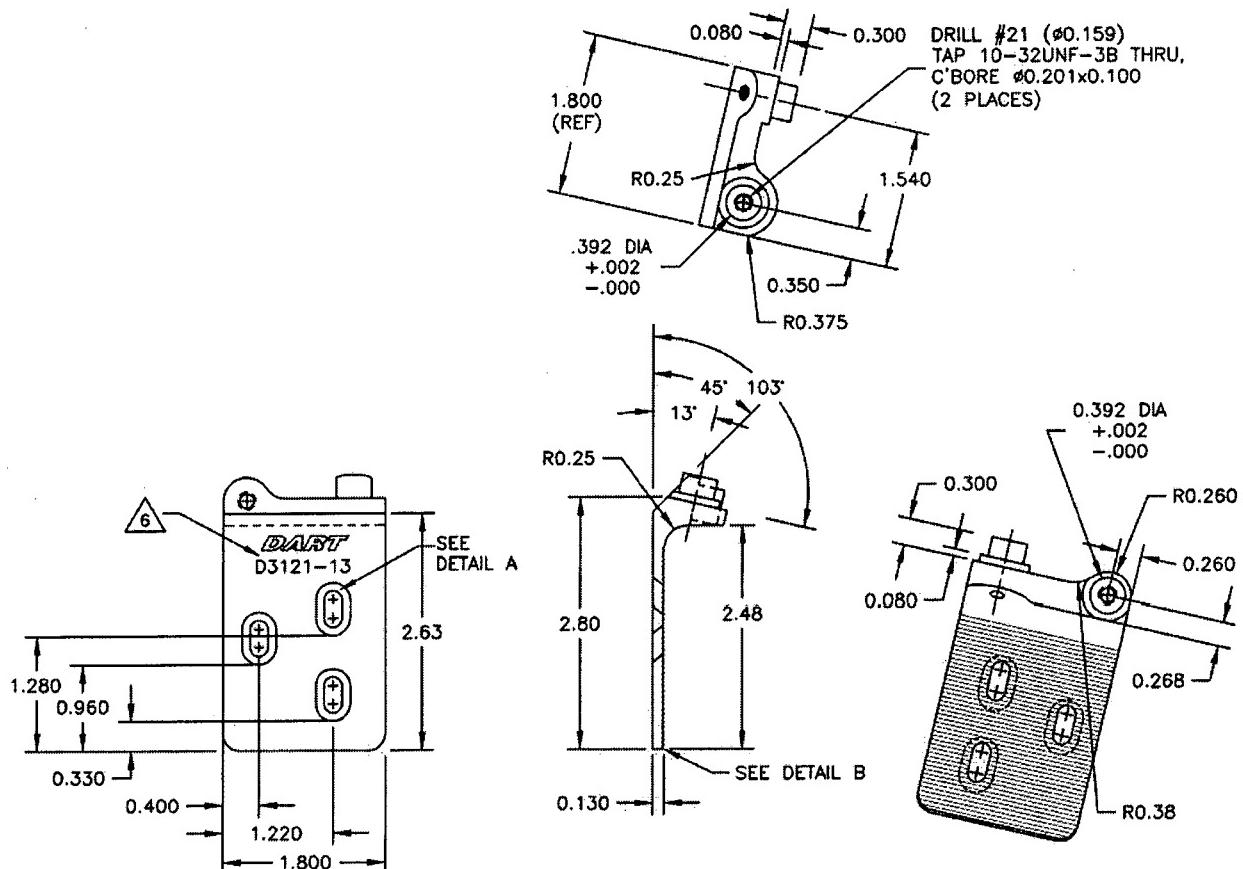
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		D3121	SHEET 5 OF 10
DATE		TITLE	SCALE
04.02.18		BRACKET ASSEMBLY	1:2



D3121-13 BRACKET (SHOWN)

D3121-14 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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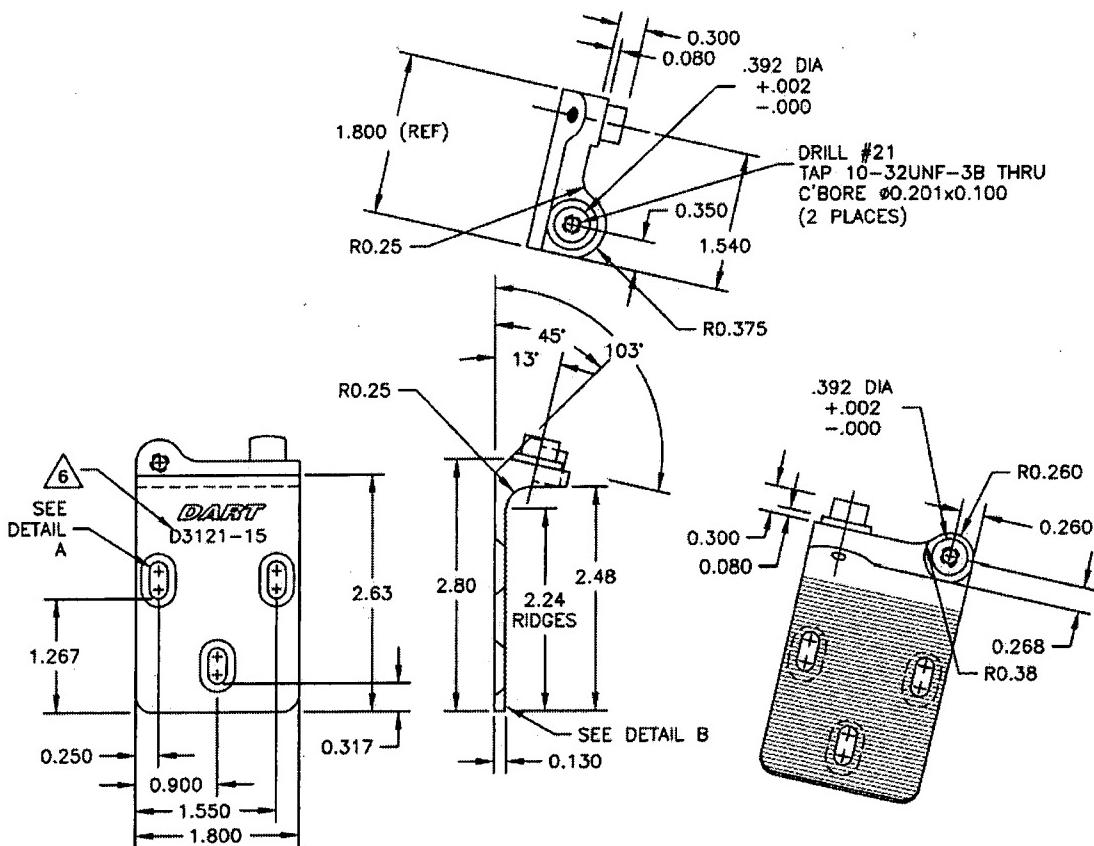
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DATE	TITLE	SCALE 1:2

04.02.18 BRACKET ASSEMBLY



D3121-15 BRACKET (SHOWN)
D3121-16 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
 MIN ULTIMATE TENSILE = 150 ksi
 MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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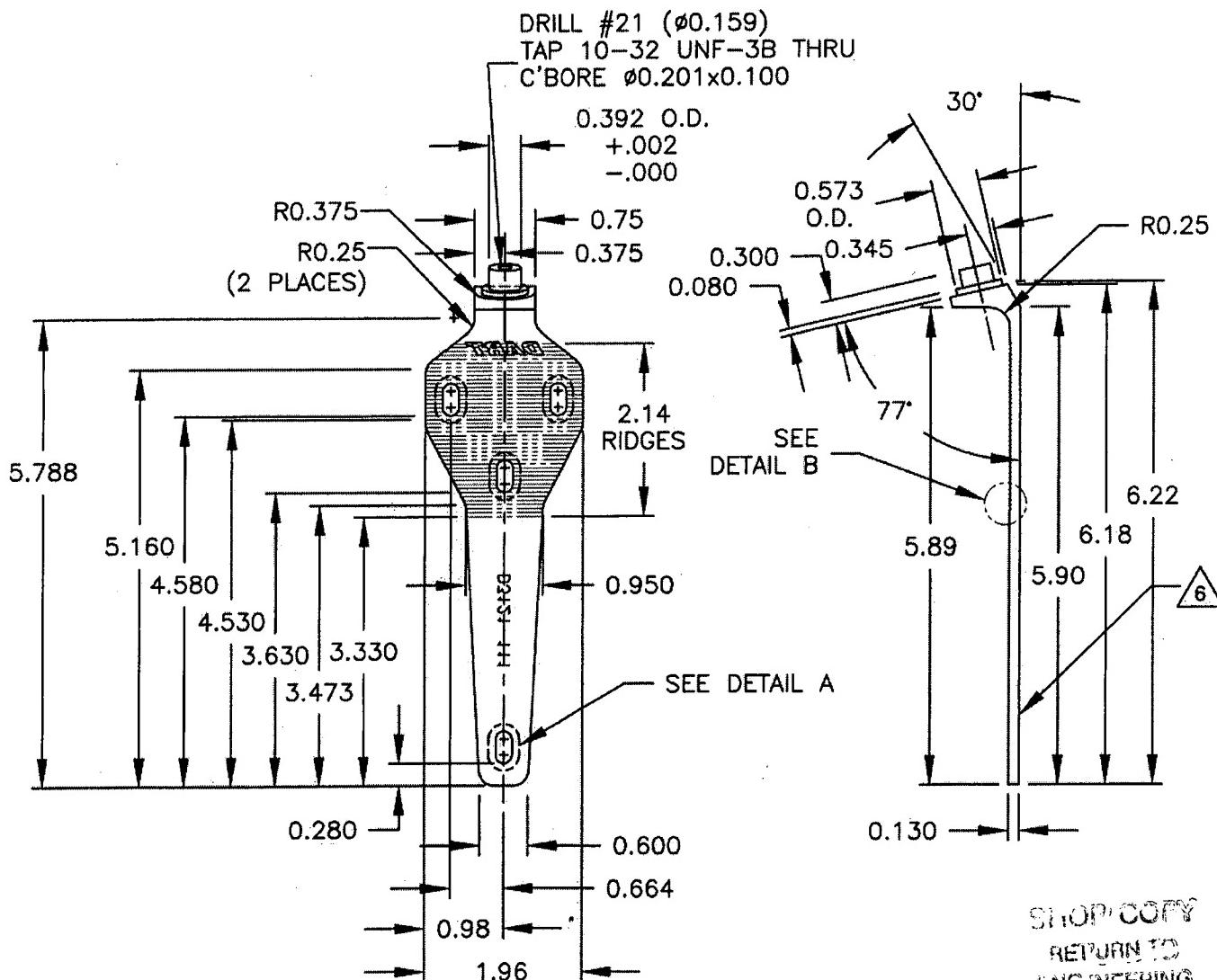
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SHEET 7 OF 10

DATE
04.02.18TITLE
BRACKET ASSEMBLYSCALE
1:2
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25551B
 04.03.01
D3121-111 BRACKET

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
 MIN ULTIMATE TENSILE = 150 ksi
 MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

DART

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DATE	DRAWING NO.
04.02.18	D3121

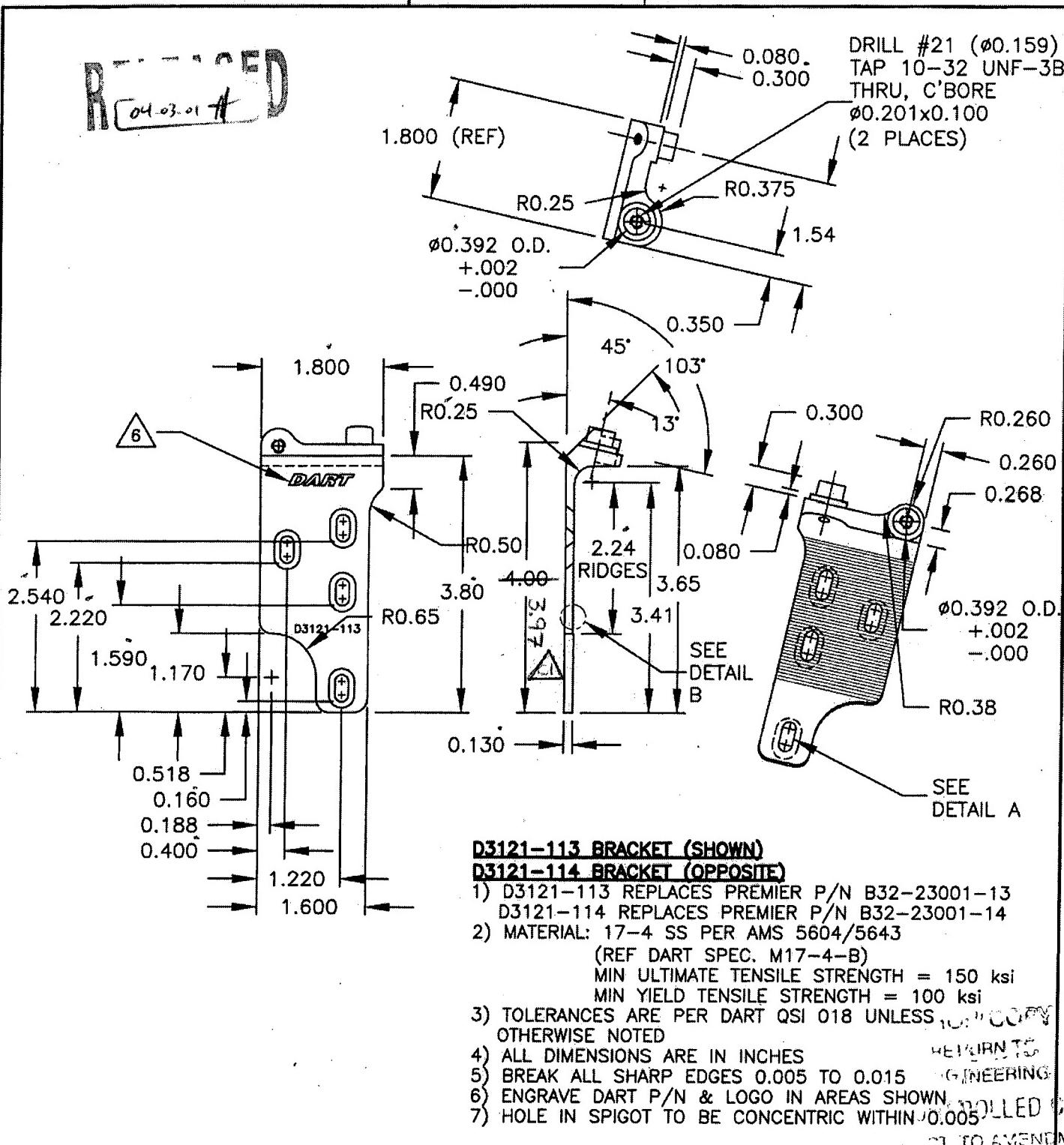
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SHEET 8 OF 10

SCALE

1:2



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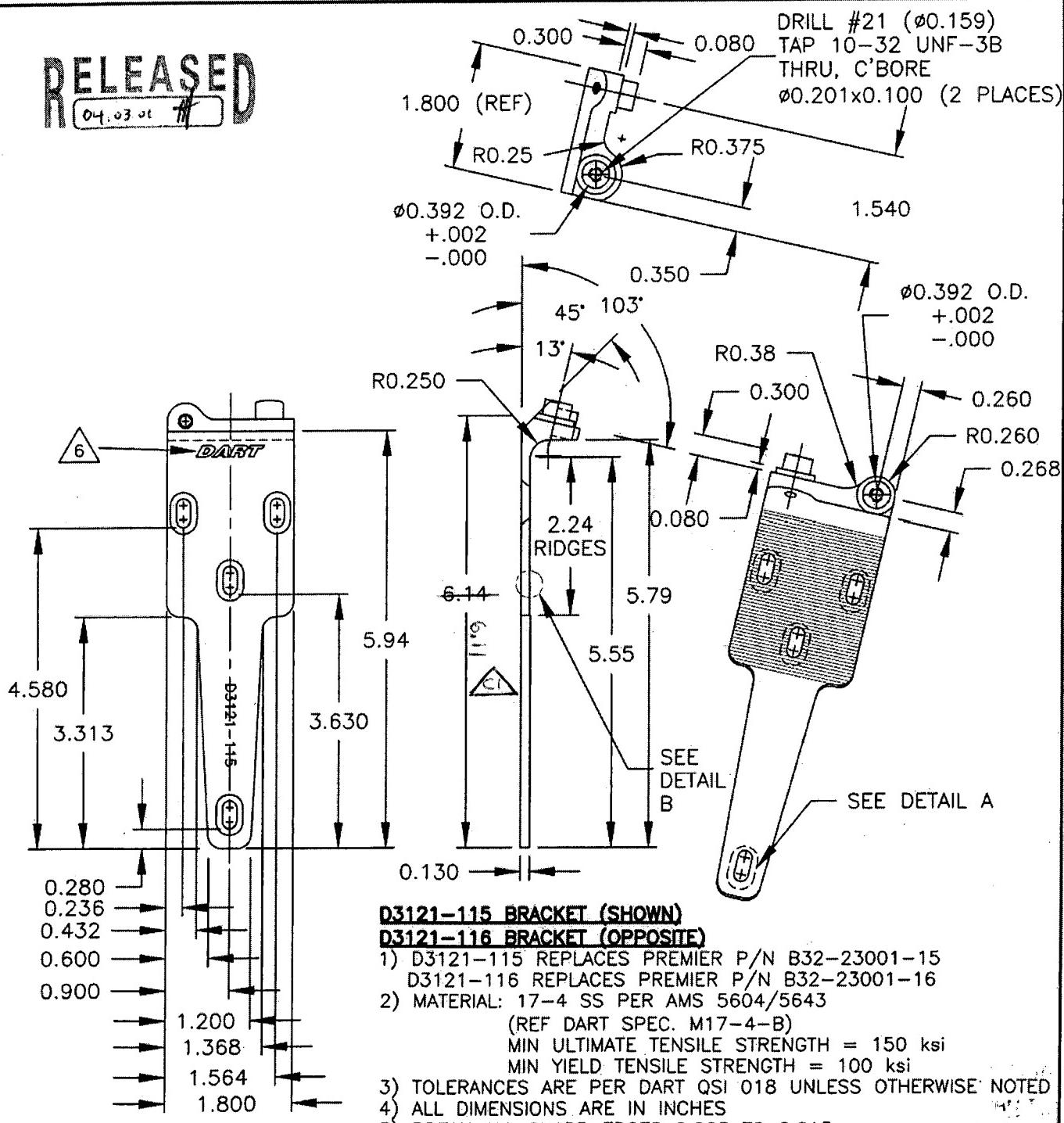
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		D3121	SHEET 9 OF 10

DATE 04.02.18 TITLE BRACKET ASSEMBLY SCALE 1:2

RELEASED
04.03.01



D3121-115 BRACKET (SHOWN)

D3121-116 BRACKET (OPPOSITE)

- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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NO. 25557B

WORK ORDER

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DATE	TITLE

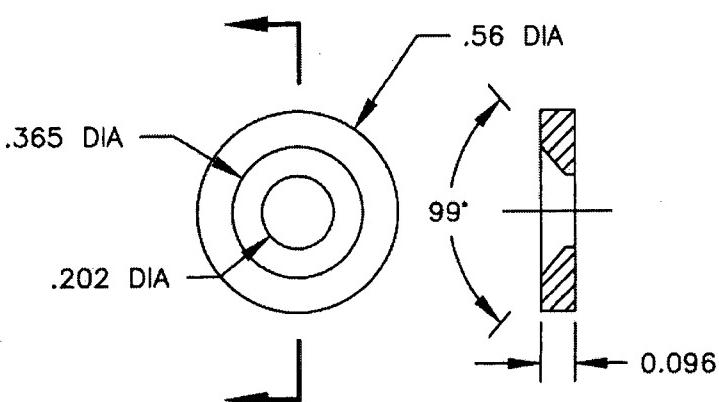
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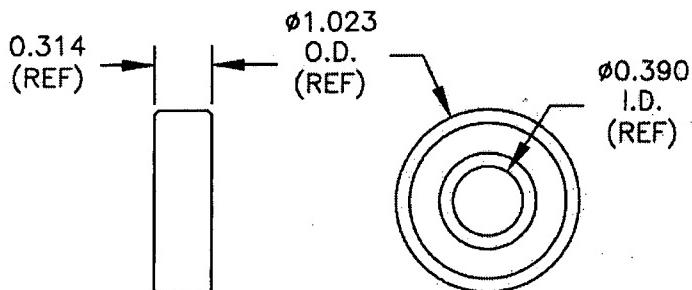
SHEET 10 OF 10

SCALE

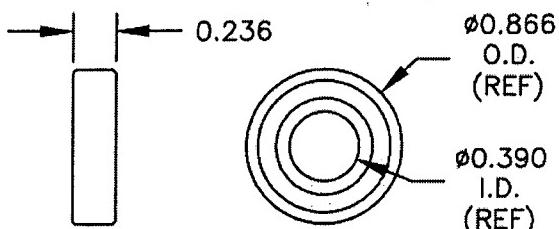
1:1

**D3121-17 WASHER (SCALE 2:1)**

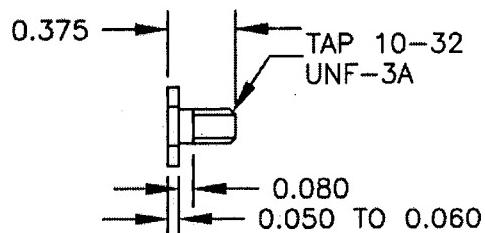
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

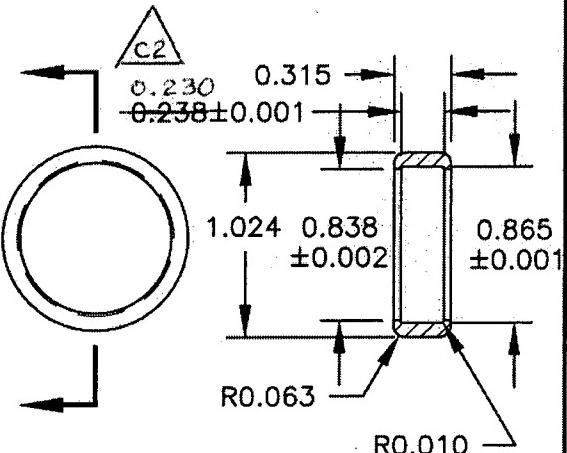
- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

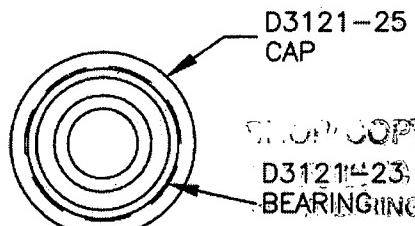
- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-2Z
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

RELEASED
04.03.01**D3121-241 BEARING ASSEMBLY (SCALE 1:1)**

NOT FOR AMENDMENT

WITHOUT NOTICE

WORK ORDER

25557B